



Nuclear Energy University Programs (NEUP) US/UK Collaborative Funding Opportunity

Call type: Collaborative research

Closing dates: 14 September 2016 - submission of US pre-applications

15 February 2017 final close - submission of full applications to US
Department of Energy (DoE)

Related themes: Energy, Engineering, LWEC, Manufacturing the future,
Physical sciences

Summary

The RCUK Energy Programme (RCUKEP), led by EPSRC, would like to encourage the participation of UK researchers in the current DoE NEUP programme. (<https://neup.inl.gov/Lists/Headlines/AnnouncementDispForm.aspx?ID=136>)

In particular the RCUKEP will support the UK component of proposals including US/UK collaboration in the following specific areas from Appendix A of the US call document:

- **Radioisotope Retention in Graphite and Graphitic Materials (RC-2)**
- **Materials Ageing and Degradation (RC-7)**
- **Reactor Safety Technologies (RC-9)**
- **Materials Recovery (FC-1.2)**
- **Advanced Waste forms (FC-1.3)** including; Waste forms development- Thermodynamics of waste glasses and melts (**FC-1.3a**), Fuel Processing Off-Gas Management- Tritium separations technology (**FC-1.3b**), Fuel processing Off-Gas management- Rb interaction with container materials (**FC-1.3c**).
- **Advanced Fuels (FC-2)** including; Reactor pool side non-destructive characterization techniques for advanced fuel concepts (**FC-2.1**) and Extreme performance metal alloy cladding for fast reactors (**FC-2.2**), critical heat flux for accident tolerant fuels (**FC-2.3**).
- **Used Nuclear fuel disposition: Disposal (FC-4)**.
- **Nuclear Energy Advanced modelling and simulation (NEAMS-1)** including *only*; **NEAMS 1.1** (Atomistic and mesoscale modelling and simulation of nuclear fuels, cladding and reactor structural materials), **NEAMS 1.2** (Macroscale fuel performance), **NEAMS 1.4** (Thermal Hydraulics) and **NEAMS 1.5** (Structural Mechanics).

Please follow this link for an introduction to the NEUP: www.neup.gov

UK applicants wishing to engage in this programme should engage directly with their US partners. There is a deadline for expressions of interest (pre-applications) which are to be submitted by the US partners to the DoE by end of **14 September 2016**.

A full call notification will be made available as soon as possible.